Auto-Selector

Single Common Component Meets Multiple Application Needs

The Configuration Auto-Selector feature is available on selected models of FieldServer products. This feature enables the manufacturer to have multiple predefined configurations loaded onto each FieldServer product. The DIP switches on the FieldServer allow selection of specific configurations necessary for an application. This means the manufacturer can meet multiple installation requirements with a single component, making stock and management of components specific jobs unnecessary which saves manufacturing costs, installation costs and enhances customer satisfaction.

This feature supports Modbus RTU, Modbus TCP/IP, BACnet MS/TP, BACnet IP, JCI Metasys N2 Open and LonWorks. **Auto-Selector** is a powerful feature unique to the ProtoCessor product line.

Features include:

- Stores multiple predefined configuration files.

    o 5-8 files can be stored depending upon the available memory (more configurations can be stored on the expanded version).

    o The more protocols are loaded on a FieldServer, the less predefined configuration files can be stored; however, the expanded version can accept a higher number of protocols and configurations.

    o The user can have BACnet IP, BACnet MS/TP, Modbus TCP, Allen Bradley EtherNet/IP and Metasys N2 by JCI loaded on a device and still load 2-4 configuration files on the standard version.

- Only one of the predefined configuration files will run on the FieldServer device at any one time.

- The S Bank of DIP switches are used to select the active configuration file.

- Utilizing the FieldServer Toolbox software provided to the OEM, a different configuration file can be downloaded to the FieldServer.

- Up to a maximum of 1,000 Modbus registers can be included in a configuration file.

A configuration file defines the protocol(s) that will be enabled and the mapping of the OEM devices to that particular protocol. A configuration file can also support similar or dissimilar OEM devices as shown by the examples that follow.

Scenario 1: Common device protocol interface to multiple protocols

The manufacturer has a device with Modbus RTU digital communications output but needs to be capable of interfacing to networks utilizing other common Building Automation protocols, including BACnet MS/TP, BACnet IP, Metasys N2 or Modbus TCP/IP. In this example, a single FieldServer (ProtoCessor) module inside an OEM controller can support multiple protocol configurations. A similar configuration could be created using a ProtoCarrier, ProtoCessor, ProtoAir or a ProtoNode if necessary.

1. Configurations for Modbus RTU to BACnet MS/TP, Modbus RTU to BACnet/IP, Modbus RTU to Metasys N2 and Modbus RTU to Modbus TCP/IP are preloaded on the ProtoCessor unit.

ProtoCessor in Controller

2. They are installed in each of the ProtoCessors during the manufacturing process.

3. At the time of installation, the correct DIP switch configuration is selected using switches S0, S1, S2 and S3 (as outlined in the manufacturer's installation procedures) to instantly configure for the correct protocol output.
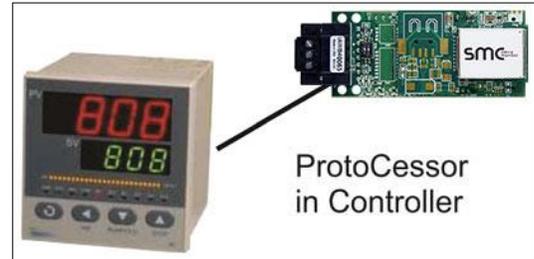
Scenario 2: Multiple devices interface to common protocol

The manufacturer produces multiple devices that might utilize the same or different proprietary protocols, have different output points or different parameters. Utilizing a FieldServer product, manufacturers can utilize the same component to ensure that each of these different devices meets the objective, such as BACnet MS/TP output.

1. Configurations for Device A to BACnet MS/TP, Device B to BACnet MS/TP, Device C to BACnet MS/TP, and Device D to BACnet MS/TP are preloaded on the ProtoNode unit.

2. They are installed in each of the ProtoNodes during the manufacturing process.

3. At the time of installation, the correct DIP switch configuration is selected using switches S0, S1, S2 and S3 (as outlined in the manufacturer's installation procedures) to instantly configure for the correct protocol output.
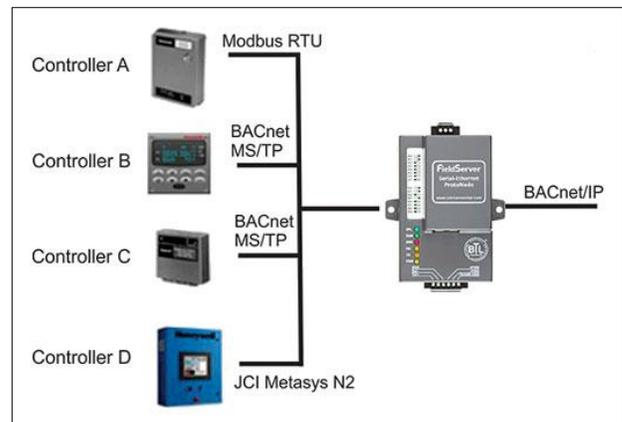
Scenario 3: Multiple devices interface to multiple protocols

The manufacturer produces multiple devices that might utilize the same or different proprietary protocols, have different output points or different parameters. Utilizing a FieldServer product, manufacturers can utilize the same gateway to ensure that each of their different devices connects to the desired field protocols including LonWorks, BACnet/IP, BACnet MS/TP, JCI Metasys N2, Modbus TCP/IP or Modbus RTU.

1. Configurations for Device A, B, C and D are preloaded on the ProtoNode unit.

2. They are installed in each of the ProtoNodes during the manufacturing process.

3. At the time of installation, the correct DIP switch configuration is selected using switches S0, S1, S2 and S3 (as outlined in the manufacturer's installation procedures) to instantly configure for the correct protocol output.
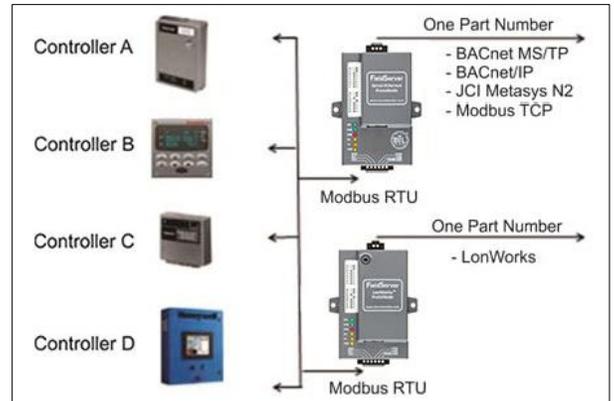
NOTE: **The power of the Auto-Selector configuration method is that it can store multiple configurations and protocols. The expanded version with additional memory can store a larger amount.**
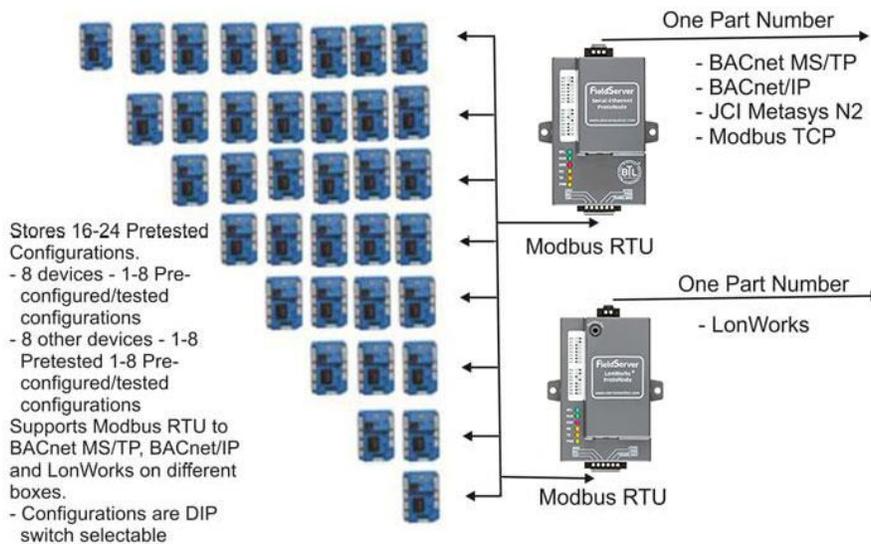
Scenario 4: The FieldServer reads a register on an OEM device to automatically load proper configuration

The FieldServer can read a register from the OEM device to automatically select the appropriate preloaded configuration without selecting DIP switches.